Washington State Department of Transportation

*Design Manual* Supplement

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Effective Date: May 3, 2000

# Left-Side HOV Parallel On-Connection

## I. Introduction

### A. Purpose

To modify Washington State Department of Transportation (WSDOT) policies regarding left-side HOV on-connections.

### B. Background

In April 1998, WSDOT published a draft *HOV Direct Access Design Guide* (HOV Guide) that gives guidance for facilities that provide direct access for high occupancy vehicles (HOVs) between an HOV lane on a freeway and a facility off that freeway. The parallel on-connection provided in the HOV Guide was for a right-side ramp with modifications for left-side connections because the *Design Manual* did not include parallel on-connections. In June 1999 the *Design Manual* was revised to include parallel on and off-connections for connections on the right. Therefore, Figure 5-3 of the HOV Guide is revised to include only left-side HOV on-connections.

In response to feedback and experience gained following the publication of the HOV Guide, Figure 5-3 is also revised to make the intended meaning clearer.

### C. References

*Design Manual*, M 22-01

*HOV Direct Access Design Guide* (HOV Guide), Draft M 22-98

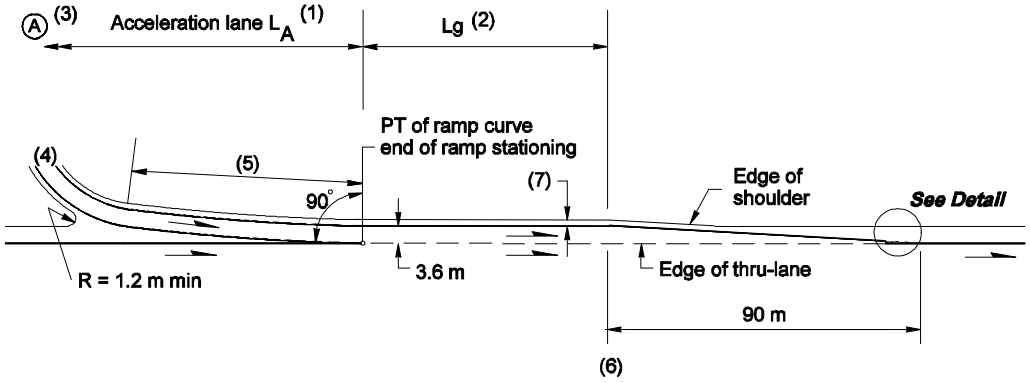
### D. Effective Date and Term

These rules and procedures are effective on the date of this letter and will expire when the changes are incorporated in the referenced manuals.

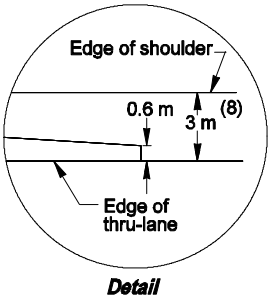
## II. Instructions

**Revise Draft HOV Direct Access Guide Chapter 5**

Replace Figure 5-3 with the attached revised Figure 5-3.




Notes:




(1) See Figure 5-4 for acceleration lane length $L_A$. Check $L_A$ for each ramp design speed.

(2) $L_g$ is the gap acceptance length. Begin $L_g$ at the beginning of the parallel lane, as shown, but not before the end of the acceleration lane $L_A$. See Figure 5-2 for the length $L_g$.

(3) Point Ⓐ is the point controlling the ramp design speed or the end of the transit stop zone or other stopping point.

(4) See 5.06 for ramp lane and shoulder widths.

(5) A transition curve with a minimum radius of 900 m is desirable. The desirable length is 90 m. When the main line is on a curve to the right, the transition may vary from a 900 m radius to tangent to the main line. The transition curve may be replaced by a 50:1 taper with a minimum length of 90 m.

(6) Angle point for width transitions, when required. See *Design Manual* Chapter 620 for pavement transitions.

(7) See 5.06 (2) for ramp shoulder width.

(8) The 3 m left shoulder is the minimum width; 4.2 m is preferred. Maintain this shoulder width for at least 150 m; 300 m is preferred.

(9) For striping, see the Standard Plans.

**Single Lane Left-Side HOV On-Connection**
***Figure* 5-3**